Perspective and Spatial Illusion as Language and Technique in Urban Art of JR

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Abstract

Street Art, as the set of artistic and performative practices within the urban space, represents one of the most significant artistic movements of modernity. Through visual imagery, Street Art invites viewers to reconsider the reality surrounding them, engaging them in a process of reinterpretation of the lived and traversed space. In this context, illusory representations, with their ability to alter perception through ephemeral spatial suggestions, offer fertile ground for experimentation by street artists. The artistic production of the Paris-based urban artist Jean René, widely known as JR, is emblematic in this regard. This study focuses on the exploration of trompe l'œil and anamorphosis as visual languages and techniques within JR's artistic practice. The aim of the research is to analyze how figurative techniques of Renaissance origin are interpreted in his urban artworks, to make explicit the complex relationship between stylistic choices and the communicative purposes of the artistic project. Through an in-depth examination of selected works, the research intends to show how the perspective construction of illusory space, reinterpreted through photography and new media, is today a visual and symbolic language capable of conveying unprecedented visions and representations of contemporary urban space.

Keywords: street art, IR, illusory perspectives, trompe l'œil, anamorphosis.

Introduction

Emerging between the late 1960s and early 1970s as an illegal phenomenon of urban space reclamation, Street Art has evolved over time, adopting diverse forms, styles, techniques, and objectives that, in their complexity, overlay signs and meanings onto the architecture of the city. Most street artists begin with a profound identification and empathy with the city: they are driven to make a statement within and through the urban environment [Irvine 2012]. From this perspective, Street Art can be understood as a practice of rewriting urban space through images that, in their 'figuractive' dimension [Bredekamp 2015], play a fundamental role in shaping the lived experience. Within this context, artists employ visual language to express ideas, emotions, and

reflections, taking the city itself as the stage for their work to reach the public in forms and through modalities more direct and unexpected than those typically found in museums or galleries. As observed by Di Luggo and Zerlenga, this practice demonstrates how "drawing, in its broadest sense, becomes a vast horizon of subjects to explore and affirms itself as a universal expressive force and, at the same time, a creative engine for storytelling through visual imagery" [Di Luggo, Zerlenga 2020, p. 10]. Like any language, that of street art possesses its own grammar and syntax, in which the themes depicted, the colors, shapes, and techniques chosen by the artist mediate specific meanings and engage viewers in different ways. Illusory representations, due to their ability to alter



perception through ephemeral spatial suggestions, offer a rich field of experimentation for artists [Attademo 2020]. They construct illusory artworks on every type of surface, employing in a contemporary key "Lo inganno degl'occhi" [Accolti 1625] of linear conical perspective, to induce in the spectator "a perception of depth that 'breaks through' the wall structure, expanding the space hosting them to the limits of the gaze" [Migliari 2014, p. 1]. Through the figurative techniques of trompe I'æil and anamorphosis, artists recreate illusory scenarios that involve the urban observer in both the recognition of the image in its true form and in the dual awareness of the reality of the image and the spatial illusion that plays on distortion and manipulation of visual perception. Anamorphosis, described as a "La Perspective curieuse ou Magie artificielle" [Niceròn 1638], is used by street artists to produce artworks that can only be correctly interpreted from a specific point of view. It is primarily employed to define illusory spatialities on horizontal planes, such as streets or squares, or on fragmented surfaces that only cohere when the viewer aligns his gaze with the projection point of the geometric construction [Pagliano 2024]. Trompe l'æil artworks, on the other hand, are typically created on vertical urban surfaces: the physiological vision acquires depth through the superimposition of the plane of representation that dematerializes the fixity of the support. Historically employed by artists from the 16th century onwards to expand the spatiality of architectural interiors, such as churches and noble palaces, this technique finds contemporary application on blind facades of ordinary buildings, endowing them with both depth and motion through spatial configurations. The illusionistic effects realized by the artists in the urban context reveal, on the one hand, an awareness, at least empirical, of the laws of central perspective and the complex mechanisms of visual perception, and on the other hand, show how the sign system of Renaissance origin is declined in the light of contemporary communicative and artistic needs. Within this framework, the work of IR, the well-known French urban artist, stands out as a particularly interesting case. His evocative and monumental images are representations of architecture, illusory perspectives that are as realistic as they are visionary, whose aesthetic and expressive sophistication captures observers with a sense of wonder and surprise. In his installations, perspective, reinterpreted through modern digital drawing tools and new media [McLuhan





Fig. 1. JR, 2001. Expo2Rue Sur les toit. Paris. (Photo © JR).

Fig. 2. JR, 2007. 28 Millimètres, Face 2 Face, Separation wall, security fence, Israeli side, Abu Dis, Jerusalem. (Photo © JR).

2015], assumes new forms, dimensions, and purposes. This evolution is inscribed within the tradition of a consolidated and extensively tested representational method and artistic language, allowing it to be read between continuity and innovation.

IR's urban art

IR, the pseudonym of Jean René, was born in France in 1983 to a family of Tunisian origin and grew up in Montfermeil, a suburb of Paris. He is also known as the 'photograffeur', a term that highlights the distinctive use of photography and black-and-white photo collages in his urban artworks. His artistic career began in 2001, when he started photographing writers at work on the rooftops and in the subways of Paris (fig. 1). Today, IR is one of the most internationally recognized urban artists. His fame and recognition are supported by numerous exhibitions and public commissions from cultural institutions and venues. As the artist himself has remarked, his projects reveal "a gentle blending between works created in full legality and others conceived in complete illegality" [Galansino 2021, p. 16]; an approach that situates a large part of his practice within the broader realm of public art. His works are temporary installations that always start and act as mediators of a reflection on the context, understood in the dual sense of site, a physical, urban, and territorial framework, and place, as a construct embedded with historical, social, and cultural meanings. Community participation and engagement are central to IR's artistic vision. He stands out for his approach to art as a practice capable of generating new relationships and opportunities, as "an activity consisting of producing relationships with the world through signs, forms, gestures or objects" [Bourriaud 2010, p. 11]. This not only amplifies the impact of his installations but also fosters a strong sense of collective belonging and identity, encouraging dialogue and critical reflection. In this sense, his work exemplifies a particular understanding of the site-specific dimension of public art, which, as art historian Deutsche defines it is a discourse that "combines ideas on art, architecture and urbanism." on the one hand, with the city's theories of social and public space on the other" [Deutsche 1996 p. 11]. JR primarily employs two figurative approaches in his work: photographic portraits [1] (fig. 2) and photo-collages of illusory spatial constructions (fig. 3). Both approaches are characterized using black and white, which, as argued by Barthes in his essay on photography, privileges symbolic and conceptual representation while simultaneously revealing the ephemeral nature of the image [Barthes 1980]. In his illusory representations, IR, as a "modern quadraturist" [Galansino 2021, p.13], uses the figurative techniques of trompe l'æil and anamorphosis to create "marvelous experiences" whose effects captivate observers by "giving shape to mutable images" [Della Porta 1611, XX]. In his works, in fact, perspective is used as an expedient to impress the viewer with his own ability to create something that resembles reality, rather than reproduce it. Superimposed on urban scenes, building facades, monuments and landscape segments, his works reveal hidden or forgotten narratives, or introduce new ones, inviting viewers to look beyond the familiar and actively interact with the artwork and its context. The viewer's level of involvement is such that they are encouraged to take up a specific position in space, creating a dialogue between the artist, the artwork, and the viewer through perceptual cues and physical interaction. The viewing experience of these installations is not limited to achieving the 'perfect view', but is enriched by the infinite range of 'imperfect views' that the viewers are encouraged to explore [Pagliano 2016, pp. 37-38]. The technique of photo-collage, which IR consistently uses in these works, enhances the ambiguity of the illusory space. On one hand, like a painting, it appears as a 'manual' result of deliberate spatial control, based on knowledge of perspective and the study of shadows that seamlessly link different elements of the artwork. On the other hand, through the composition of photographic fragments, the collage appears less "artificial and imaginary" than an architectural drawing and more "true and credible, like a photograph" [Marra 2012, p. 65]. This duality allows IR to play with public perception, crafting artworks that challenge the boundary between reality and illusion (fig. 4). Beginning with his first installation at the Louvre Museum in 2016, JR initiated a focused exploration of perspective space. Through the analysis of key artworks created in urban contexts of strong symbolic significance, this article highlights how the perspectival construction of represented space is continually adapted to serve the communicative aims of the artistic project.

IR's Anamorphosis at the Louvre

IR created two monumental installations at the Louvre Museum in Paris, both centered around the iconic glass Pyramid designed by architect I.M. Pei in 1989, an emblematic structure symbolizing the dialogue between ancient and modern architecture, and now a globally recognized symbol of the city. Invited by the museum in 2016, IR produced an installation on the northwest facade of the Pyramid. This artwork consisted of a photographic collage in anamorphosis, designed to create a visual illusion that effectively made the Pyramid disappear (fig. 4). The piece restructured and expanded the perception of the Sully Wing facade, located behind the modern structure, highlighting the full architectural profile of the historical building. The anamorphic technique enabled IR to distort a photographic collage of the hidden portion of the Sully Wing onto the inclined surface of the Pyramid, making it visually coherent only when viewed from a specific vantage point, coinciding in this case with the actual observer's eye (fig. 5). Through the alignment of points in real space with those in the image, the viewer perceives the continuity between architectural elements such as arches, openings, and string courses. Notably, the alignment of the lateral turrets of the building's central block, rising above the image, amplifies the illusion of a unified visual plane. This allows visitors approaching from the Place du Carrousel to experience the same space in a different temporal dimension. The reflection on the passage of time and the reverence for the past evokes Hubert Robert's imaginary view of the Grand Gallery of the Louvre in Ruins (1796) (fig. 6), a visionary view depicting the Grand Gallery in a ruined atmosphere during its construction. At the same time, IR, by making the Pyramid disappear, emphasizes the void as the presence of an absence [Catalan 2021]. As the artist stated in an interview, "we should make it [the Pyramid] disappear so that people can rediscover the pleasure of seeing it reappear" [Galansino 2021, p. 18]. Indeed, the Pyramid becomes the visual focus of the entire experience: the viewer is induced to find the privileged vantage point, moving around it in search of visual deception.

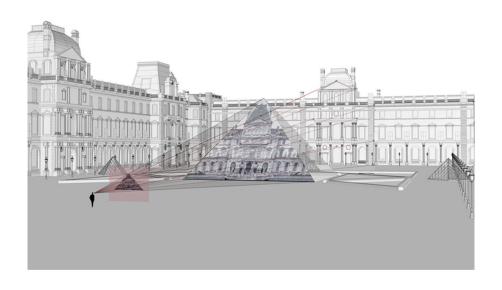
In 2019, IR returned to the Louvre to commemorate the 30th anniversary of the glass Pyramid's construction. This time, the artist developed an installation across the horizontal plane of the Cour Napoléon, incorporating





Fig. 3. JR, 2023. Retour à la Caverne, Acte I, 6 September 2023, h 08:20. Palais Garnier, Opéra de Paris. (Photo © IR).

Fig. 4. JR, 2016. JR au Louvre, La Pyramide, 12 June 2016, h 05:55. Pyramide, architecte I.M. Pei, Musée du Louvre, Paris, France. (Photo © |R).



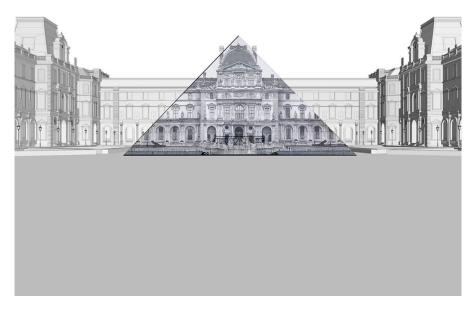


Fig. 5. Top: three-dimensional reconstruction of the anamorphic process used to distort the image into its true form on the inclined surface of the Pyramid. Bottom: three-dimensional reconstruction of the view from the projection center. (Graphic elaboration by the author).





Fig. 6. Hubert Robert, 1796. Vue imaginaire de la Grande Galerie du Louvre en ruines. Oil on canvas. © 2007 GrandPalaisRmn (musée du Louvre) / lean-Gilles Berizzi.

Fig. 7. IR, 2019. IR at the Louvre Museum & The secret of the Great Pyramid. Louvre Museum, Paris, 2019. (Photo © JR).

benches and the smaller satellite pyramids present in the square. The installation, The Secret of the Grand Pyramid (fig. 7), stands as IR's largest participatory photographic collage, involving around 400 volunteers who helped cut and paste over 2,000 sheets of paper. Again, employing the technique of anamorphosis [2], IR extended the illusion below the pavement of the courtyard, creating an evocative, cavernous, and rocky spatiality from which the Pyramid now appeared to emerge. The image, distorted along the horizontal surface, remained incomprehensible to viewers moving within the square. The anamorphic viewpoint was positioned at the center of the Sully Wing facade, precisely at the height of the parapet of the top floor of the building. During the creation process, a camera was installed at this strategic point to capture the image from the exact angle needed to reveal the anamorphic effect. Two large screenplaced in the square broadcasted this perspective in real time, progressively revealing the image as it was constructed. In this case, the ideal viewer of the geometric construction didn't coincide with the real observer's location. This mechanism actively engaged viewers, encouraging them to contrast their subjective, physiological perception of the creative space with the elevated viewpoint that revealed the image in its true form. In this installation, the camera assumed the geometric and symbolic role of the projection center, the observer's eye, translating the artistic experience into a mediated, technological dimension that reinterprets perspectival language and expands its physical and expressive potential.

IR's Trompe l'œil Series and the 'Rip in the Monument'

Whit his first anamorphic installation at the Louvre, IR initiated an in-depth artistic exploration of increasingly complex and articulated illusory spatialities. The *Trompe* I'æil series, which has a dedicated section on the artist's official website, gathers these projects [3]. In 2021, JR carried out two notable interventions in Italy, unveiling the architectural interiors of two prestigious historical buildings through perspective: La Ferita on the facade of Palazzo Strozzi in Florence (fig. 8) and Punto di Fuga at Palazzo Farnese in Rome (fig. 9). In these artworks, the illusionistic representation originates from a rip, a simulated material rupture in the architectural support, revealing the depth of the depicted space behind





Fig. 8. JR, 2021. La Ferita, 19 March 2021, h 06:34, Palazzo Strozzi, Florence, Italy. (Photo © IR).

Fig. 9. |R 2021. Punto di Fuga, 23 |uly 2021, h 05:50, Rome, Italy. (Photo © |R).

the facade. These rips, constructed using perspective, assume diverse shapes, in continuity with the design and features of the facades they inhabit, establishing an ambiguous limen between real and represented space. This enhances the realism of the illusion and deceives the observer's eye. Despite their variations, the rips share an irregular profile that evokes a sense of collapse and ruin. This choice bestows the artworks with an aura of decay, suggesting a narrative of transformation and vulnerability that stands in stark contrast to the monumentality of the buildings on which they are installed. In keeping with the originally irreverent and subversive spirit of street art, this contrast invites the viewer to deconstruct both the image and the conventional imaginary associated with the monument. La Ferita, created in Florence in spring 2021, presents an enormous gash on the main facade of Palazzo Strozzi, ideal model of a Renaissance noble residence. Commissioned by the Fondazione Palazzo Strozzi, the installation reflects on access to culture during the pandemic: "the work speaks to us about a deserted city [...] a metaphorical destruction of the world of culture, the arts and research, a real drama through an ephemeral, illusionistic and powerful image. Palazzo Strozzi thus becomes the spectacular stage for a tear, symbolic but painful, that unites all cultural institutions in Italy and elsewhere: museums, libraries, cinemas and theatres forced to keep their doors closed. It is therefore not only a site-specific but also a time-specific artwork" [Gálansino 2021, p. 12].

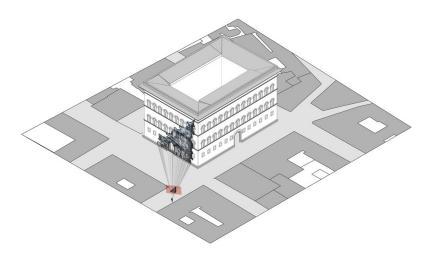
The anamorphic artwork on the main facade reveals several interior spaces of the palace: the colonnade of the courtyard, an exhibition room on the piano nobile, and a room of the National Institute of Renaissance Studies' library. The composition is enriched with iconic pieces of art of Florentine heritage, such as Botticelli's Primavera and The Birth of Venus, housed in the Uffizi, and Giambologna's Rape of the Sabine Women, located in the Loggia dei Lanzi. The view, coherent and plausible at first glance, reveals a palimpsest of architectural environments and artistic references displaced across space and time. This superposition of reality and imagination recalls the tradition of the 18th-century capriccio: "a pictorial invention that creates an imaginary or analogous reality by combining existing buildings or spaces with imagined ones, displacing or reorganizing their placement and composition within



Fig. 10. Perspective analysis with identification of the horizon line in JR's La Ferita. (Graphic elaboration by the author).

evocative visions" [Steil 2013, p. LIII]. The installation was constructed using approximately 80 printed aluminum panels mounted on a metal scaffolding structure affixed to the building's facade. Starting from a photograph of the artwork, which captures the privileged viewpoint of illusionistic construction, the perspective analysis reveals a visual coherence between the vanishing lines of the perspective section and those of the actual building that share the same direction (fig. 10). The vanishing points lie on a single horizon line, situated approximately 180 centimeters above ground level, measured at the level of the ashlar stone on the facade. This position of the horizon line is consistent with the height of the observer's eye; a relationship further highlighted by the presence of a person in the photograph: the horizon line passes exactly at the eye level of this figure. From a frontal view, the image appears distorted, revealing the illusory spatiality only when the observer adopts the correct viewpoint of the geometric construction, which is notably off-center relative to the facade (fig. 11). This choice is probably influenced by the limited space in front of the main facade, which would not allow a complete view of the building except from a sharp angle of observation. The 'corner scene' thus becomes the privileged view of the perspective construction: the diagonal lines of the composition give dynamism to the image, encouraging the observer's eye to actively explore the scene.

La Nascita, created in Rome in the summer of the same year, is a trompe l'œil in central perspective, positioned on the main facade of Palazzo Farnese. The project is part of the initiative Palazzo Farnese: Open for Works, promoted by the French Embassy, which is hosted in the palace itself. The project arose from the need to cover the restoration site of the building's facade and roof, transforming the temporary closure into an opportunity for artistic enhancement. The intervention employs the same visual language as the previous installation in Florence; the perspective reveals the interior spaces of the palace, such as the vestibule with its columns and decorated barrel vault, the courtyard, and the Sala dei Fasti. Additionally, the artwork features the statue of the Ercole Farnese, which, although it was once hosted in the palace, is currently preserved at the



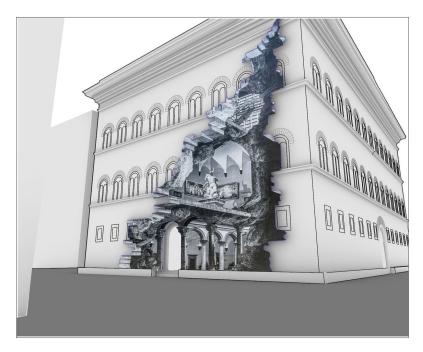


Fig. 11.Top: three-dimensional reconstruction of JR's anamorphosis at Palazzo Strozzi, showing the projection center in relation to the urban surroundings. Bottom: three-dimensional reconstruction of the view from the projection center. (Graphic elaboration by the author).



Fig. 12. Perspective analysis with identification of the horizon line and the vanishing points of the lines orthogonal to the picture plane in JR's Punto di Fuga. (Graphic elaboration by the author).

National Archaeological Museum (MANN) in Naples. Starting with the photographic image of the artwork, it is possible to observe that the perspectival construction is articulated, in this case, into three segments of central perspective, each with its own vanishing point for the lines orthogonal to the picture plane, located near the main doorway of the Palazzo (fig. 12). The vanishing points all lie on the same horizon line which, as shown in the perspective reconstruction by Francesca Porfiri and Luca James Senatore, is positioned at a height of approximately 160 centimeters from the ground, thus, once again, corresponding to the viewer's eye level [Porfiri, Senatore 2021]. While the perspectival construction in the previous intervention appears rigorous, in this case the deviations adopted by the artist, namely the decision to displace the vanishing points of the lines orthogonal to the picture plane at different positions along the horizon line, can be interpreted as 'expedients that depart from the strictness of a unified viewpoint in order to make the visual experience of the simulated space less rigid, and thus more natural" [Rossi 2014, p. 322]. These choices serve the overall spectacular effect and enhance the viewer's experience, showcasing IR's command of the technique and his ability to adapt it in service of the desired illusionistic effect.

Conclusions

In IR's artistic practice, perspective becomes a medium for re-signifying the narrative of the urban space. His ephemeral and temporary installations, through the creation of illusory spatialities, invite the viewer-interpreter to explore hidden stories and imaginative visions, evoking wonder and surprise. The projects examined reveal how he adapts perspectival language each time to tell different stories, shaped by the specificity of the context and the expressive aims of each intervention. In these artworks, the interaction and mimesis between real space and figurative space, supported by modern digital drawing tools, emphasize the illusory character of the representation, which takes on dimensions, forms, and purposes unique to contemporary. With its ability to direct and capture the observer's gaze, in these artworks perspective becomes an open and accessible language through which the artist communicates not only with experts and art enthusiasts, but also with everyday urban viewers, engaging them in a perceptual game that cannot go unnoticed. In conclusion, IR's artistic practice demonstrates how perspective, through the techniques of trompe l'œil and anamorphosis, is reinterpreted within the context of urban art, generating visual and illusionistic experiences that, in their temporal brevity, inscribe new layers of meaning onto the discourse of the city [Barthes 1967].

Credits and Acknowledgments

Special thanks to the artist JR for granting permission to include photographic reproductions of his artistic projects in this article. All JR images are the property of JR. All rights reserved.

Notes

- $\left[I \right]$ For an in-depth of JR's photographic portraits see Eckhard 2015.
- [2] For the realization of the artwork, JR collaborated with the Paris-based creative studio SUPERBIEN, which was commissioned to develop the three-dimensional anamorphic projection of the image onto the physical structure. The process involved creating a digital ren-
- dering of the Cour Napoléon and constructing a 3D model, necessary to determine the printing parameters for each square meter of the ground intervention. ("https://www.superbien.studio/projects/jr-the-secret-of-the-great-pyramid, last access 20.06.2025).
- [3] For an in-depth of JR's 'Trompe l'oeil' artworks see: https://www.jr-art.net/project-list/trompes-loeil (accessed 12 February 2025).

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